

This listing of claims replaces all prior versions, and listings, of claims in this application.

Listing of Claims:

1. (Currently amended) A multi-mode in-vehicle control unit to be placed in a vehicle, comprising:

a first ~~modem~~ communication device to send vehicle data collected from the vehicle over a first transmission network;

a second ~~modem~~ communication device to send vehicle data collected from the vehicle over a second transmission network; and

selection means to determine whether to send the vehicle data using the first transmission network or the second transmission network in accordance with a selection parameter according to a priority.

2. (Original) The multi-mode in-vehicle control unit recited in claim 1, wherein the vehicle data relates to status of the vehicle.

3. (Currently amended) The multi-mode in-vehicle control unit recited in claim 1, wherein the vehicle data is emergency data having a highest priority and the selection means determines whether to send the emergency data using the first transmission network or the second transmission network according to the highest priority.

4. (Currently amended) The multi-mode in-vehicle control unit recited in claim 1, further comprising a third ~~modem~~ communication device to send status data collected from the vehicle over a third transmission network, and wherein the selection means determines whether to send the vehicle data using the first transmission network, the

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second transmission network or the third transmission network in accordance with the selection parameter.

5. (Currently amended) The multi-mode in-vehicle control unit recited in claim 4, wherein the third transmission network is a satellite transmission system, and the third ~~modem~~ communication device is a satellite modem to communicate with the satellite transmission network.

6. (Original) The in-vehicle control unit recited in claim 5, wherein the third transmission network is used to transmit vehicle data that is emergency related.

7. (Currently amended) A system for managing a fleet of vehicles, comprising:

a multi-mode in-vehicle control unit in one or more of the vehicles in the fleet of vehicles, wherein each in-vehicle control unit comprises:

a first ~~modem~~ communication device to send vehicle data collected from the vehicle over a first transmission network;

a second ~~modem~~ communication device to send the vehicle data collected from the vehicle over a second transmission network; and

selection means to determine whether to send the ~~status~~ vehicle data using the first transmission network or the second transmission network in accordance with a selection parameter; and

means for managing the fleet of vehicles using the vehicle data wherein the means for managing the fleet of vehicles comprises means for resolving conflicts in transmission network usage.

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8. (Currently amended) The system recited in claim 7, further comprising means for resolving conflicts in transmission network usage when transmission of the vehicle data would otherwise overburden one or both of the first and second transmission networks.

9. (Currently amended) The system recited in claim 8 7, where in the resolving means further comprises means for bumping an in-progress vehicle data transmission.

10. (Original) The system recited in claim 7, wherein the vehicle data is vehicle status data.

11. (Original) The system recited in claim 7, wherein the vehicle data is related to an emergency.

12. (Currently amended) A method for sending vehicle data from an in-vehicle control unit to a processing center, comprising the steps of:

collecting the vehicle data;

determining whether to transmit the vehicle data to a the processing center over a first transmission network or a second transmission network according to a priority; and

transmitting the data to the processing center over the first transmission network using a first modem if the determining step determines that the vehicle data should be transmitted over the first transmission network; and

transmitting the data to the processing center over the second transmission network using a second modem if the determining step determines that the vehicle data should be transmitted over the second transmission network.

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13. (Currently amended) The method recited in claim 12, further comprising ~~the step of~~collecting vehicle status data.

14. (Currently amended) The method recited in claim 12, further comprising ~~the step of~~collecting vehicle data related to an emergency.

15. (Currently amended) The method recited in claim 14, further comprising ~~the step of~~resolving a transmission network usage conflict when transmission of the vehicle data would otherwise overburden one or both of the first and second transmission networks.

16. (Currently amended) The method recited in claim 15, further comprising ~~the step of~~bumping an in-progress transmission of vehicle data.

17. (Currently amended) A method for managing a fleet of vehicles having a plurality of vehicles, comprising:

placing ~~an in-vehicle control using~~ a multi-mode in-vehicle control unit in at least one of the plurality of vehicles in the fleet of vehicles ~~every vehicle in the fleet of vehicles, wherein at least one of the in-vehicle control units is a multi-mode in-vehicle control unit;~~

collecting vehicle data for each vehicle in the fleet;

~~determining whether to send~~ send ~~the collected vehicle data over a first transmission network or a second transmission network according to a priority;~~

transmitting the vehicle data to a processing center wherein the transmission of the vehicle data associated with the vehicles in which a multi-mode in-vehicle control unit has been placed is sent over a first transmission network or a second transmission

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network in accordance with a selection parameter; and using the determined first or second transmission network; and

analyzing the vehicle data to generate routing schedules to route the vehicles in the fleet.

18. (Currently amended) The method recited in claim 17, wherein each multi-mode in-vehicle control unit ~~ICU performs the steps of~~ comprises:

determining whether to transmit the vehicle data to a processing center over a first transmission network or a second transmission network in accordance with the selection parameter according to a priority; and

transmitting the data to the processing center over the first transmission network using a first modem if the determining step determines that the vehicle data should be transmitted over the first transmission network; and

transmitting the data to the processing center over the second transmission network using a second modem if the determining step determines that the vehicle data should be transmitted over the second transmission network.

19. (Currently amended) The method recited in claim 17, further comprising ~~the steps of:~~

determining a percentage of the vehicles in the fleet that is not covered by a particular transmission network; and

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placing multi-mode in-vehicle control units only in a number of vehicles in the fleet corresponding to the percentage of the vehicles in the fleet not covered by the particular transmission network.

20. (Currently amended) The method recited in claim 17, further comprising ~~the step~~ of logging vehicle data that cannot be transmitted to the processing center in real-time or near real-time.

21. (Currently amended) The method recited in claim 17, further comprising ~~the step~~ of logging vehicle data that cannot be ~~transmitting~~ transmitted over a highest priority transmission network.

22. (Currently amended) The method recited in claim 17, further comprising ~~the steps of~~:

logging the vehicle data; and

transmitting the vehicle data a later time when costs are reduced.

23. (New) A multi-mode in-vehicle control unit to be placed in a vehicle, comprising:
a plurality of communication devices, each communication device configured to transmit data over a transmission network according to a transmission protocol, wherein at least two of the plurality of communication devices are configured to transmit data according to different transmission protocols; and

selection means to determine which communication device to use to send the vehicle data in accordance with a selection parameter.

24. (New) The device recited in claim 23, further comprising:

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means for bumping a transmission already in progress with a higher priority transmission; and

means for storing vehicle data associated with the bumped transmission so that the vehicle data associated with the bumped transmission can be sent at a later time.

25. (New) The device recited in claim 23, further comprising:

means for determining which of the first and second transmission networks represents a least cost for transmitting the vehicle data; and

means for transmitting the data on the one of the first and second transmission networks determined represent the least cost for transmitting the vehicle data.

26. (New) The device recited in claim 23, further comprising a memory for storing the vehicle data.

27 (New) The device recited in claim 24, further comprising means for transmitting the vehicle data stored in the memory.

28. (New) A method for providing data about a vehicle, comprising:

placing in the vehicle a device that can transmit the data over one of a plurality of transmission networks;

selecting one of the plurality of transmission networks to use to transmit the vehicle data in accordance with a priority; and

transmitting the vehicle data over the selected transmission network.

29. (New) The method recited in claim 28, further comprising:

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bumping a transmission already in progress with a higher priority transmission;
and

storing vehicle data associated with the bumped transmission so that the vehicle data associated with the bumped transmission can be sent at a later time.

30. (New) The method recited in claim 28, further comprising:

determining which of the first and second transmission networks represents a least cost for transmitting the vehicle data; and

transmitting the data on the one of the first and second transmission networks determined represent the least cost for transmitting the vehicle data.

31. (New) The method recited in claim 28, further comprising storing the vehicle data.

32. (New) The method recited in claim 31, further comprising transmitting the vehicle data stored in the memory at a time when a cost associated with transmitting the vehicle data is reduced.

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Concluded.